Щ 

15

Improved formulation for topical non-invasive application in vivo 5 This application is a centinuation of PCT/EP98/08421 filed December 23,1998.

The invention relates to formulations comprising molecular arrangements which, owing to penetrant adaptability, are capable of penetrating pores in a barrier, despite the fact that the average diameter of said pores is smaller than the average penetrant diameter. 10 The penetrants can transport agents or else enable agent permeation through the pores after said penetrants have entered said pores. The invention especially relates to new additives to said formulations, such as consistency builders, anti-oxidants or microbicides. It further relates to the preparation and use of such formulations wherein the agent is selected from corticosteroids. Finally, it relates to a method for the preparation of all such formulations.

The efficacy of any drug action is a multiparameter function in which the instrinsic potency, the accumulation as well as the elimination kinetics of the drug all play a role. While the former is entirely determined by the chemical composition of the drug the 20 latter two parameters are sensitive to the galenic characteristics of agent formulation and also depend on the site and rate of agent administration.

Choosing the right mode and kind of drug application is thus as important as finding the right agent - in medicine as well as in the pharmaceutical industry. For example, if an 25 epicutaneously administered drug is incapable of getting into and/or across the skin barrier such a drug has no practical value even if it has a high intrinsic potency. The same is true for the drugs that get into the skin easily but are there eliminated too rapidly to fully develop the desired biological action. In either case an optimization of agent formulation may help. Devising an improved galenic formulation is also much faster 30 and more inexpensive than the invention of the corresponding new chemical entity.